

Some Membracidae from West Africa, Including Descriptions of a New Genus and Eight New Species

by

A. L. CAPENER

P.O. Box 4, Cleveland, Johannesburg

Thanks to the kindness of Dr. A. Villiers of the Institut Français d'Afrique Noire, Dakar, I have been permitted to study a number of Membracidae from the collection of this Institute, which includes a new genus and seven new species. A new species was also found in some material sent to me by the late Mr. H. Jover of the Institut Intercolonial d'Adiopodoume, Abidjan, Ivory Coast, a description of which is included in this paper. To both these gentlemen I wish to express my thanks.

Owing to the present rather unsatisfactory state of the classification of many of the African Membracidae, the species in this collection are listed in alphabetical order. In a few cases specimens were rather too badly damaged for accurate identification and it was felt that one or two specimens of *Gargara* spp. might be varietal forms of known species and it was thought undesirable to describe these as new species until more material could be examined.

***Acanthophyes risbeci* sp. n. (Fig. 1, 2, 3.)**

Near *A. mairei* de Bergevin (1932) but differing in the female in the much shorter suprahumeral horns which are little more than carinae.

Female. *Head* about twice as wide as long; vertex subquadrate, brown, sculptured, densely shortly brownish-ochraceously pubescent, upper margin arcuate and a little sinuate, lower margin convex and slightly declivous; eyes brownish-ochraceous, large, prominent; ocelli ochraceous, sunken, about as far from each other as from the eyes and situated on the centro-ocular line; clypeus obscure, being partly hidden by the dense whitish tomentosity which covers the postgenae and encroaches on the clypeus; rostrum dark brown, extending as far as the bases of the posterior coxae; antennae ochraceous.

Thorax. *Pronotum* densely brownish ochraceously pubescent, a little whitish sericeous behind the suprahumeral horns; cephalic margin marginate; metopidium vertical, wider than high; suprahumeral horns reduced to little more than carinae, sloping slightly backwards, apically curved and marginally

carinate; posterior process moderately slender, weakly sinuous, almost contiguous with the scutellum, tricarinate, reaching the extremity of the abdomen, tip weakly recurved; median carina keel-like and strongly percurrent; sides of thorax very densely whitish tomentose; humeral angles strong and blunt, extending laterally beyond the extremities of the eyes; tegmina dull whitish opaque, base brownish and coriaceous, veins brown and a little sericeous, pterostigma well developed, five apical and three subapical cells; legs simple, basal joints dark brown; tarsi and tibiae brownish-ochraceous.

Scutellum wider than long, brownish and somewhat sericeous.

Abdomen below dark brown, more or less whitish sericeous. Length 4.5 mm.; width across suprahumeral horns 1.5 mm.; across eyes 1.8 mm.; across humeral angles 2 mm.

Described from a single female holotype collected at M'Bambey (Sénégal) by J. Risbec. No date given. Holotype in coll. Institut Français d'Afrique Noire.

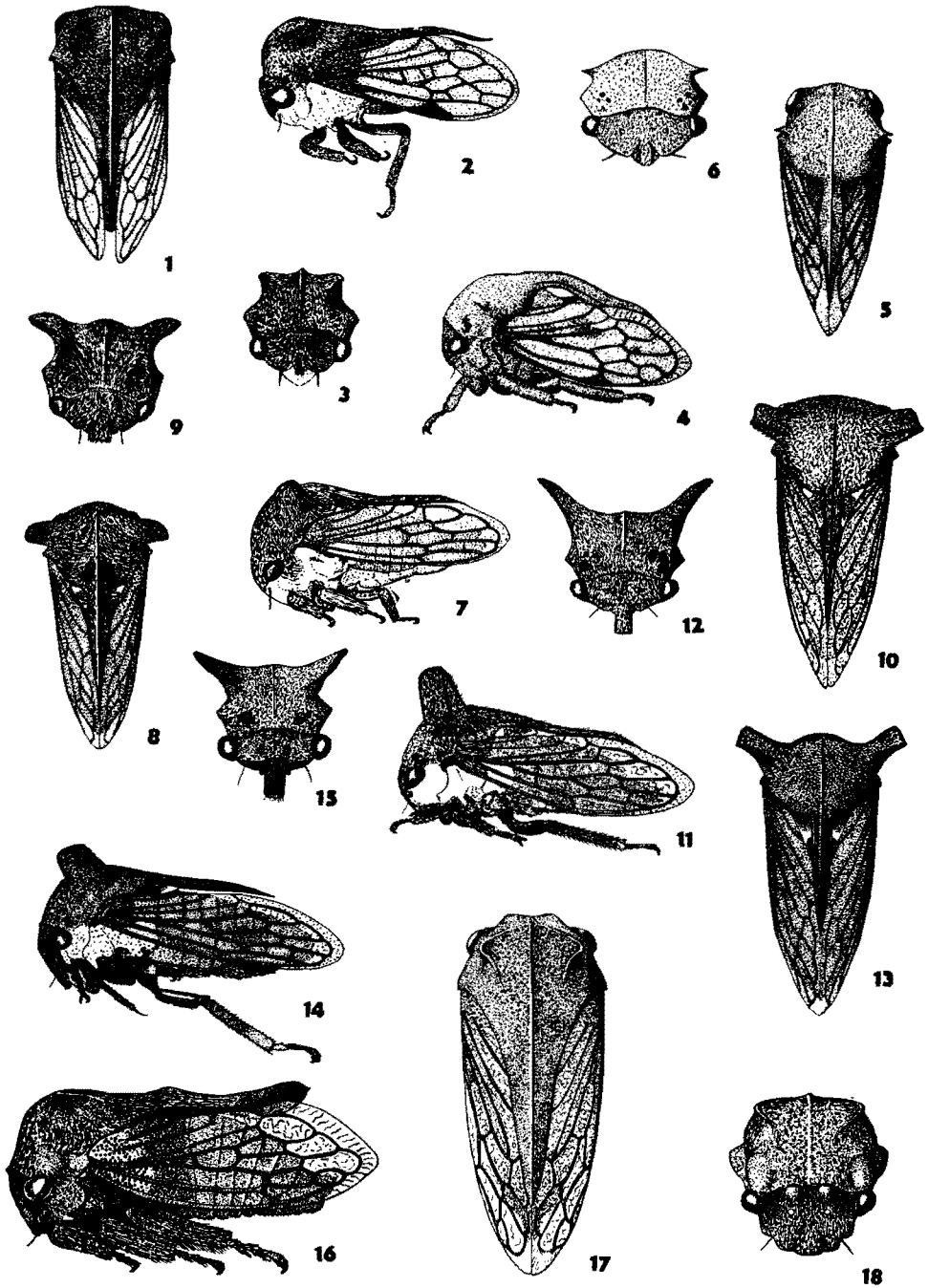
***Acanthophyes maculipennis* sp. n. (Figs. 4, 5, 6.)**

Nearest to *A. risbeci* but rather more robust, with more spinose suprahumeral horns and with the basal third of the posterior process raised above the scutellum.

Small castaneous, with sharp suprahumeral horns, somewhat sinuous posterior process which is a little swollen at the middle, tegmina whitish opaque mottled with dark brown.

Female. *Head* about twice as wide as long; vertex subquadrate, castaneous, lightly sculptured, finely punctate, shortly palely pilose, upper margin arcuate and very slightly sinuate, lower margins rounded and declivous; eyes lead coloured with pale brown margins, large, extending outwards almost as far as the humeral angles; ocelli yellowish amber, about as far from the eyes as from each other and situated about on the centro-ocular line; clypeus declivous, longer than wide, broadly sulcate on either side, rostrum extending to base of posterior coxae; antennae pale ochraceous.

Thorax. *Pronotum* castaneous, finely punctate and very shortly pilose with pale golden hairs; metopidium wider than high, sloping backwards towards the disc; suprahumeral horns very short and spinose, not extending outwards beyond the humeral angles, horizontal, laterally carinate; posterior process somewhat robust, arching a little above the scutellum and impinging on its apex where it becomes gradually a little swollen, thence acuminate and a little sinuous following the curve of the tegmina and about reaching the beginning of the margin of the fourth apical cell; tegmina about two and a half times as long as wide, whitish opaque mottled with dark brown, veins brown, darker on apical area, very finely pubescent, base very narrowly coriaceous, pterostigma coriaceous, five apical and two subapical cells; humeral angles triangular, blunt, extending laterally as far as the suprahumeral horns and very slightly farther than the eyes; sides of the thorax more or less densely pilose; legs simple, castaneous. A second specimen is



a little sericeous on the head and base of metopidium, and densely tomentose on the sides of the thorax; it has also very slightly shorter suprahumeral.

Male. Differing from the female in its much darker colour, the complete absence of suprahumeral horns, the less sinuate posterior process and the absence of the dark maculae on the tegmina.

Length ♀ 5 mm.; width at humeral angles 2.25 mm.

Length ♂ 4.3 mm.; width at humeral angles 2 mm.

Holotype ♀, allotype ♂ and one ♀ paratype collected by Dr. A. Villiers and L. Chopard at Agadez (Aïr Sud) 22-25: VIII: 1947. Holotype and allotype in coll. I.F.A.N., paratype ♀ in my collection.

Gargara aterrima Distant (1915)

Two specimens. Mt. Nimba N.E. 500-700 m. (Guinée française), 1-20 IX 1946, A Villiers coll.; Sinlitro (Liberia E.), 1948, B. Holas et P. L. Dekeyser coll.

Gargara perpolita Distant (1915)

One specimen. Ziabli (Liberia E.), 1948, B. Holas et P. L. Dekeyser coll.

Hamma grahami Distant (1916)

Three specimens. Mont Tonkoui (Côte d'Ivoire), 20-30: IX: 1946, A. Villiers coll.

Hamma pattersoni Distant (1916)

1 female. Mont Tonkoui (Côte d'Ivoire) 20-30: IX: 1946 (Celtina), A. Villiers coll.

KEY TO FIGURES

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|----------|---------------------------------------|----------------------------|-------------------|
| Fig. 1. | <i>Acanthophyes risbeci</i> sp. n. | ♀ | Dorsal aspect. |
| Fig. 2. | " | " | Lateral aspect. |
| Fig. 3. | " | " | Frontal aspect. |
| Fig. 4. | " | <i>maculipennis</i> sp. n. | ♀ Lateral aspect. |
| Fig. 5. | " | " | Dorsal aspect. |
| Fig. 6. | " | " | Frontal aspect. |
| Fig. 7. | <i>Otinotus albescens</i> sp. n. | ♀ | Lateral aspect. |
| Fig. 8. | " | " | Dorsal aspect. |
| Fig. 9. | " | " | Frontal aspect. |
| Fig. 10. | " | <i>spatulatus</i> sp. n. | ♀ Dorsal aspect. |
| Fig. 11. | " | " | Lateral aspect. |
| Fig. 12. | " | " | Frontal aspect. |
| Fig. 13. | " | <i>joveri</i> sp. n. | ♀ Dorsal aspect. |
| Fig. 14. | " | " | Lateral aspect. |
| Fig. 15. | " | " | Frontal aspect. |
| Fig. 16. | <i>Oxyrhachis senegalensis</i> sp. n. | ♀ | Lateral aspect. |
| Fig. 17. | " | " | Dorsal aspect. |
| Fig. 18. | " | " | Frontal aspect. |

Hybanda lamborni Distant (1913)

1 female. Mont Nimba N.E., 500-700 m. (Guinée française), 1-20: IX: 1946, A. Villiers coll.

Leptocentrus altifrons Walker (1851)

Eleven specimens, 4 ♂, 7 ♀. Ziabli (Liberia E.), 1948 B. Hollas et P. L. Dekeyser coll. Mont Nimba N.E., 500-700 m. (Guinée française), 1-20: IX: 1946, A. Villiers coll.

Monocentrus bipennis Walker (1851)

[= *M. laticornis* (Schmidt) (1911)]

Three specimens. Penoké (Liberia), B. Holas et P. L. Dekeyser coll. Mont Nimba N.E., 700-800 m. (Guinée française), 1-20: IX: 1946, A. Villiers coll.

Monocentrus insularis Schmidt (1911)

One specimen. Mont Tonkoui (Côte d'Ivoire), 20-30: IX: 1946, A. Villiers coll.

Negus asper Jacobi (1910)

Two specimens. Mont Nimba N.E., 700-800 m. (Guinée française), 1-20: IX: 1946, A. Villiers coll.

Otinotus albescens sp. n. (Figs. 7, 8, 9)

Near *O. bantuantus* Dist. (1908), but differing in the shorter, more rounded suprahumeral horns, and the more dense pubescence on the pronotum and head.

Female. *Head* much wider than long; vertex subquadrate, densely pubescent with greyish-ochraceous hairs, upper margin arcuate, lower margins declivous and a little rounded near the clypeus; eyes ovate, prominent, pale brown mottled with blackish; ocelli large, light brown, conspicuous, about as far from each other as from the eyes and situated about on the centro-ocular line; clypeus declivous, long, broadly lobate at base, expanding and somewhat truncate at the tip, densely pilose; postgenae densely whitely tomentose; antennae dark brown.

Thorax. *Pronotum* black but almost concealed by the greyish-ochraceous pilosity; metopidium convex and almost vertical, a little wider than high, several very small bare callosities above the eyes; suprahumeral horns a little shorter than the distance between their bases, moderately robust, extending outward and a little upward, strongly rounded frontally and somewhat angulate posteriorly, lateral margins strongly carinate, a short carina below a little caudad of a median line and a weak carina above it on the dorsal surface, apex of dorsal surface a little convex and granulate; posterior process moderately robust, tricarinate and acuminate to tip which reaches almost to the beginning of the fourth apical cell of the tegmina, lying contiguous with the scutellum and tegmina; tegmina subhyaline, pale amber, about three times as long as wide, base narrowly ochraceously

coriaceous and weakly punctate, veins pale brown and a little pilose, five apical and three subapical cells; humeral angles blunt and subprominent; legs simple, basal joints blackish and a little tomentose, tarsi and tibiae pale brown with pale brown hairs.

Scutellum wider than long, basal angles narrowly whitely tomentose, greyishly pilose, tip widely emarginate.

Abdomen greyish and deeply punctate above, more or less densely pilose below.

Length 7.75 mm.; width across suprahumeral horns 4.5 mm., across humeral angles 3.8 mm., across eyes 3.0 mm.

Holotype ♀ and paratype ♀ from Niakhar (Senegal), Dec., 1945, A. Villiers coll. Holotype in coll. I.F.A.N., paratype in my collection.

Otinotus spatulatus sp. n. (Figs. 10, 11, 12)

Near *O. bantuantus* Dist., but differing in the much longer, more upwardly directed, spatulate and truncate suprahumeral horns, and in the somewhat narrower clypeus.

Black with golden-yellow pubescence, sides of thorax thickly whitely tomentose, suprahumeral horns rather long, spatulate, extending outward and upward, tips truncate.

Female. *Head* about twice as wide as long; vertex subelliptical, black with short golden-yellow pubescence, finely punctate, weakly sculptured, upper margin weakly arcuate, lower margins slightly declivous, very weakly sinuate and very slightly upturned; eyes prominent, dull ochraceous mottled with brown, somewhat oblique; ocelli amber coloured, slightly sunken, about equidistant from each other and from the eyes and situated about on the centro-ocular line; clypeus somewhat narrower than in *bantuantus* Dist., much longer than wide, extending for about two-thirds its length below the lower margins of the vertex, weakly lobate at base; postgenae thickly whitely tomentose.

Thorax. *Pronotum* black, finely punctate with short golden-yellow pubescence; metopidium wider than high, somewhat backwardly sloping with several bare callosities above the eyes; suprahumeral horns upwardly, outwardly and very slightly forwardly directed, longer than the distance between their bases, somewhat spatulate with the tips abruptly truncate, strongly laterally carinate, a carina on the dorsal surface from the posterior angle to the disc of the pronotum, another carina below it on the ventral surface; posterior process lying close to the scutellum and inner margin of tegmina, somewhat slender and acuminate to tip which reaches just to the margin of the fourth apical cell of the tegmina, tricarinate; median carina strongly percurrent along the posterior process, becoming weaker on the disc of the pronotum and on the metopidium; humeral angles blunt, extending outwards very slightly beyond the eyes; tegmina about two and a half times as long as wide, subhyaline, pale amber, somewhat wrinkled, veins brown and well defined, base narrowly coriaceous and shortly pilose, five apical

and two subapical cells, apical limbus wide; wings with four apical cells. A large white tomentose patch on the metathorax can be seen through the wings on each side. Sides of thorax thickly whitely tomentose; legs simple, black at basal joints and sparsely tomentose, femora, tibiae and tarsi brown.

Scutellum wider than long, black shading to yellowish at the emarginate tip, basal angles narrowly whitely tomentose.

Abdomen blackish above, sparsely tomentose and longly greyishly pilose beneath.

Length 8 mm.; width across tips of suprahumeral horns 5 mm.; width across eyes 3.25 mm.

Holotype ♀ from Rufisque (Sénégal), Oct., 1949, B. Faye coll. in coll. I.F.A.N.

Otinotus joveri sp. n. (Figs. 13, 14, 15)

Very close to the preceding species *spatulatus*, but differing in the slightly shorter, more forwardly and outwardly directed suprahumeral horns, the slightly sinuous upper margin of the vertex, the shorter less dense pilosity, the slightly shorter posterior process, in the presence of three subapical cells and its slightly smaller size.

Female. *Head* about twice as wide as long, vertex subelliptical, dark brown, finely punctate, very shortly palely pilose, upper margin arcuate and a little sinuate, lower margins very slightly downwardly sloping, a little convex and a little upturned; eyes large, prominent; ocelli pale ochraceous, a little sunken, about as far from each other as from the eyes and situated on the centro-ocular line; clypeus a little wider than in *spatulatus*, about twice as long as wide, weakly lobate at base.

Thorax. *Pronotum* dark brown, finely punctate, shortly finely pilose; metopidium convex and a little backwardly sloping, several bare callosities above each eye; suprahumeral horns directed outwards, forwards and a little upwards, dorso-laterally compressed, marginally strongly carinate, as long as the distance between their bases, tips truncate, frontal angle curved, posterior angle rectangulate; posterior process rather slender, tectiform, tricarinate, lying close to the scutellum and tegmina, extending to about half way along the margin of the fifth apical cell of the tegmina; humeral angles prominent, blunt; tegmina about three times as long as wide, sordid hyaline, veins dark brown and well defined, base narrowly coriaceous, dark brown, punctate, five apical and three subapical cells, apical limbus wide; wings with four apical cells and a broad limbus; a large white patch on the metathorax can be seen through the wings; sides of thorax densely creamily tomentose; legs simple, dark brown, apices of intermediate and posterior tibiae ochraceous, first joint of posterior tarsi ochraceous.

Scutellum wider than long, base dark brown and deeply punctate, apex ochraceous and deeply roundedly emarginate.

Abdomen dark brown, posterior margins of tergites paler, shallowly punctate, shortly palely pilose beneath.

Length 7.2 mm.; width across suprahumeral horns 4.25 mm., width across eyes 3.0 mm.

Holotype ♀ collected by the late Mr. H. Jover at Adiopodoumé, Ivory Coast, 14: II: 50, in my collection.

***Oxyrhachis senegalensis* sp. n. (Figs. 16, 17, 18)**

Near *O. gambiae* Fairm. (1846), but differing in the very short supra-humeral horns and the shorter posterior process.

Female. Head. Vertex subquadrate, a little wider than long, dark brown, darker adjacent to the eyes, very finely punctate, shortly pilose with pale hairs, upper margin arcuate and a little sinuate with a slightly swollen prominence above each ocellus, lower margins almost vertical below the eyes, then a little excavated then almost vertical again, turning inwards at right angles to meet the clypeus; eyes pale brown, slightly oblique, basally ringed with ochraceous; ocelli moderately large, brown, inconspicuous, about as far from each other as from the eyes and situated a little below the centro-ocular line; clypeus about as wide as long and scarcely extending below the lower margins of the vertex.

Thorax. Pronotum dark brown, deeply punctate, shortly palely pilose, especially below and behind the suprahumeral horns and on the metopidium; metopidium almost vertical, a little wider than high, a bare callosity above each eye; suprahumeral horns very short, obtuse, little more than carinae, almost horizontal, tricarinate; posterior process rather short, reaching only a little beyond the inner angles of the tegmina, broad at base entirely concealing the scutellum, slightly raised at the middle, tricarinate, gradually tapering to the apex which is vertically ampliate above, very finely serrate below and very slightly upturned and a little darker than at the base; tegmina about two and a half times as long as wide, hyaline, somewhat wrinkled, base coriaceous, ochraceous and deeply punctate, veins brown, five apical and three subapical cells; the segmentation of the abdomen is clearly visible through the wings; humeral angles blunt extending well beyond the eyes; legs brownish ochraceous, tibiae laterally compressed, tarsi a little darker.

Abdomen brown with posterior margins of tergites ochraceous, very shortly pilose below.

Length to tips of tegmina 6. mm.; width at humeral angles 2.75 mm., at eyes 2.25 mm., at tips of suprahumeral horns 2.0 mm.

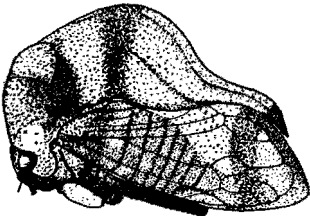
Holotype ♀ from M.Bao pres Dakar (Senegal), 29:I:1946, A. Villiers coll., in coll. I.F.A.N.

***Oxyrhachis bisenti* Distant (1915)**

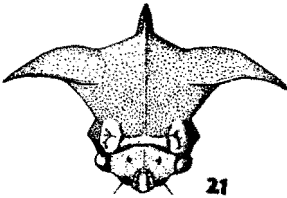
There are six specimens of what I take to be this species, although they were far out of the range of previously recorded captures. M'Bambey (Senegal), J. Risbec coll. Irabellaben (Monts Baguezans, Aïr), 23-31: VIII: 1947, L. Chopard et A. Villiers coll.

***Oxyrhachis gambiae* Fairmaire (1846)**

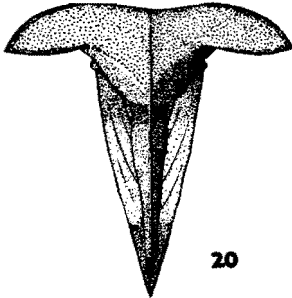
Four specimens. Bissau (Guinée portugaise), Dec., 1947, A. Villiers coll.



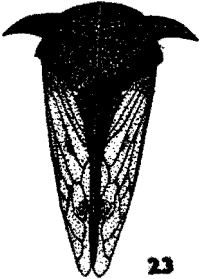
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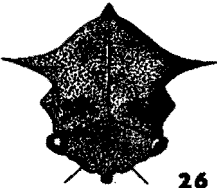
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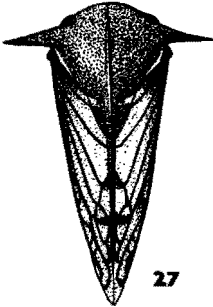
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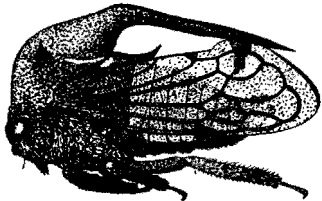
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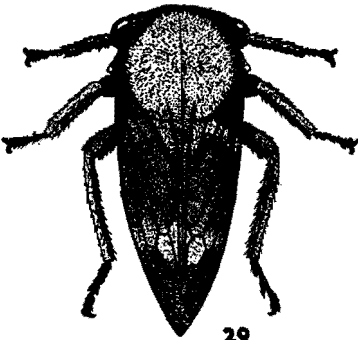
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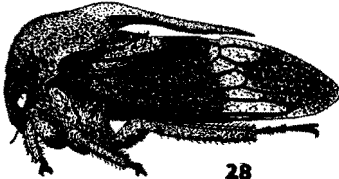
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Platybelus globifer Pelaez (1935)

Three specimens. Mont Nimba N.E., 500-700 m. (Guinée française), 1-20: IX: 1946, A. Villiers coll.

Takliwa carteri Funkhouser (1935) (Figs. 19, 20, 21)

Funkhouser's figure of this species is misleading as to the form of the suprahumeral horns, and it was at first thought that the specimen in the collection of I.F.A.N. was a distinct species. However, the photograph of the type specimen of *carteri* in the Commonwealth Institute of Entomology collection removes all doubt.

This particular specimen has clear hyaline tegmina, but Funkhouser states that they are yellow and semi-opaque. The veins of the hind wings can be clearly seen through the tegmina, and this probably accounts for the fact that there are stated to be four discoidal cells, whereas there are really only two.

The single ♀ specimen was collected by B. Holas and P. L. Dekeyser at Zouedrou (Liberia) in 1948.

Tricoceps geniculatus Stal (1866) (Figs. 22, 23, 24)

This species was originally placed in *Xiphistes* by Stal. In 1927 Funkhouser placed it in *Xiphopoeus*, and in 1932 Goding erected a new genus *Euxiphopoeus* for this species and *hirculus* Jacobi (1910). I have secured a very clear photograph of the type of this species through the kindness of the officials of the British Museum, and this proves conclusively that it clearly belongs to the genus *Tricoceps* (Capener, 1952). This collection contained six females and it seems desirable to re-describe and figure this species here. (Figs. 22, 23, 24.)

Female. Head wider than long, blackish-brown, vertical; vertex subquadrate, sculptured, upper margin arcuate and very slightly sinuate, lower margins declivous, slightly sinuate and a little forwardly upturned; eyes

KEY TO FIGURES

Fig. 19.	<i>Takliwa carteri</i> Funkh.	♀	Lateral aspect.
Fig. 20.	"	"	Dorsal aspect.
Fig. 21.	"	"	Frontal aspect.
Fig. 22.	<i>Tricoceps geniculatus</i> Stål	♀	Lateral aspect.
Fig. 23.	"	"	Dorsal aspect.
Fig. 24.	"	"	Frontal aspect.
Fig. 25.	"	<i>tenuosus</i> sp. n.	♀ Lateral aspect.
Fig. 26.	"	"	Frontal aspect.
Fig. 27.	"	"	Dorsal aspect.
Fig. 28.	<i>Yaponotus villiersi</i> gen. et sp. n.	♀	Lateral aspect.
Fig. 29.	"	"	Dorsal aspect.
Fig. 30.	"	"	Frontal aspect.
Fig. 31.	"	"	Nymph Dorsal aspect.
Fig. 32.	"	"	Nymph Lateral aspect.

pale brown, mottled with darker brown, oblique; ocelli dark brown, about as far from each other as from the eyes and situated above the centro-ocular line; clypeus about as wide as long, shortly lobate at base, extending about two-thirds its length below the lower margins of the vertex, tip rounded and rather longly pilose, rostrum extending to posterior coxae; antennae rather long, entirely pale brown; postgenae somewhat whitely tomentose.

Thorax. *Pronotum* rufous to dark chocolate-brown shading to blackish on the metopidium, punctate and finely tuberculate with golden pubescence; metopidium a little higher than wide, almost vertical, deeply punctate and goldenly pubescent, but without tubercles, several bare irregular callosities above each eye, suprahumeral horns robust, a little longer than the distance between their bases, subconical, extending slightly upward and backward with the tips very slightly decurved, apices subacute, lateral margins weakly carinate; posterior process rising somewhat abruptly from the disc of the pronotum well above the scutellum where it is slightly swollen, below strongly tuberculate, thence roundedly elbowed and extending to the tips of the tegmina in a robust acuminate, tricarinate process, tip blunt; median carina strongly percurrent, becoming obsolete a little above cephalic margin; tegmina pale amber hyaline, darker at apex, basally pale brown and narrowly coriaceous with short golden pubescence, veins pale brown with small black tubercles and short golden pubescence, a darker brown macula at the inner angle extending into the fifth apical cell, a thickly tuberculate area between veins M1 and M3, the tubercles terminating in short golden hairs, the subcosta becoming strongly thickened at its apex to form a rudimentary pterostigma, five apical and two subapical cells, apical limbus wide; humeral angles blunt; sides of thorax more or less thickly whitely tomentose; legs simple, basal joints black, tarsi and tibiae brown, first joint of posterior tarsi twice as long as second.

Scutellum a little wider than long, brown and goldenly pilose, basal angles narrowly whitely tomentose, base somewhat gibbous, tip strongly upturned and longly pilose, apex bifid and decurved.

Abdomen greyish and deeply punctate above, greyishly pilose below.

Length 4.7 to 5.1 mm.; width across suprahumeral horns 3.1 to 3.9 mm., across humeral angles 2.0 to 2.3 mm., across eyes 1.8 to 1.95 mm.

The six specimens from which this description was prepared were collected at Mont Nimba N.E., 500-700 m. (Guinée française), 1-20 IX 1946, by A. Villiers. One specimen exhibits a variation in the sharper elbowing of the posterior process.

***Tricoceps tenuosus* sp. n. (Figs. 25, 26, 27)**

Nearest to *T. guineensis* Pelaez (1935), but differing from this species in the longer, sharply spinose, straight and horizontal suprahumeral horns.

Female. *Head* wider than long; vertex subelliptical, black, very finely punctate, very shortly goldenly pilose, upper margin arcuate and scarcely

sinuate, lower margins downwardly sloping, slightly sinuate and slightly upturned; eyes dull brown, moderately large; ocelli dark brown, not sunken, about as far from each other as from the eyes and situated about on the centro-ocular line; clypeus strongly declivous, a little longer than wide, narrowly lobate at base, tip upturned, extending below lower margins of vertex for about two-thirds its length; antennae with basal joint ochraceous, flagellum brown.

Thorax. *Pronotum* entirely black, shining, finely densely punctate, microscopically sparsely goldenly pilose; metopidium about as wide as high, almost vertical, several irregular bare callosities above each eye; disc of pronotum sloping sharply backwards to base of posterior process; supra-humeral horns about as long as the distance between their bases, attenuate and very sharply pointed, extending directly outward horizontally, not backwardly curved, marginally weakly carinate, dorsally with a very short weak carina at the tip; posterior process broad at base, strongly raised above scutellum, then declivous, straight and acuminate to tip which just reaches the margin of the third apical cell of the tegmina, impinging on the tegmina at the inner angle, strongly tricarinate; median carina percurrent, strongly so on posterior process becoming weaker on disc and metopidium; a streak of greyish pilosity from the basal angles of the scutellum to the bases of the suprahumeral horns; humeral angles blunt; tegmina nearly three times as long as wide, clear hyaline across the middle third, coriaceous, finely punctate and shortly, finely, goldenly pubescent at base, apical third pale amber hyaline, veins strong, pale brown, darker from pterostigma to inner angle and along apical margin, a dark brown fascia from the inner angle to the base of the fifth apical cell, pterostigma dark brown and well developed, five apical and two subapical cells, limbus moderately broad; legs simple, dark brown, posterior tarsi paler; sides of thorax densely goldenly and greyishly pilose.

Scutellum a little wider than long, finely punctate, very finely shortly pilose, greyishly tomentose, tip upturned and broadly emarginate, basal angles greyishly tomentose.

Abdomen above grey and deeply punctate, below darker and greyishly pilose.

Length 6 mm., width at tips of suprahumeral horns 4.2 mm., across eyes 2.5 mm.

Holotype ♀ collected by Dr. A. Villiers at Mont Nimba N.E., 500-700 m. (Guinée française), 1-20: IX: 1946, in coll. I.F.A.N.

Tshaka undulatus Distant (1916)

One specimen. Mont Tonkoui (Cote d'Ivoire), 20-30: IX: 1946, A. Villiers coll.

Uroxiphus maculiscutum Amyot & Serville (1843).

One female. Dalaba (Guinée française), no date, Durand coll.

Yaponotus gen. nov.

Near *Uroxiphus* but differing in the shape of the head, the vertical metopidium and the shape of the posterior process.

Head sculptured, upper margin of vertex arcuate and slightly sinuate, lower margins downwardly sloping and sinuous; eyes large and somewhat oblique, ocelli a little closer to the eyes than to each other and a little above the centro-ocular line; clypeus somewhat roundedly lobate at base, extending well below the lower margins of the vertex.

Thorax. *Pronotum* without suprahumeral horns; posterior process rising slightly above disc of pronotum, slightly sinuous and raised above the scutellum, tricarinate and acuminate to tip which extends beyond the inner angles of the tegmina; tegmina with more or less parallel veins, without pterostigma, with five apical and two subapical cells; hindwings with four apical cells; humeral angles triangular and prominent; legs simple, femora tricarinate, first joint of posterior tarsi much longer than second and terminating in a short spine. Scutellum wider than long, tip broadly emarginate but not upturned.

Genotype *Yaponotus villiersi* sp. n. (Figs. 28 to 32)

Dark brown with golden pubescence, tegmina shining dark brown banded with lighter.

Female. *Head* much wider than long, dark brown; vertex subelliptical, shallowly punctate, strongly sculptured, goldenly pubescent, upper margin arcuate and a little sinuate, lower margins downwardly sloping and sinuous, slightly forwardly upturned; eyes prominent and a little oblique; ocelli large, sordid ochraceous, a little raised, slightly closer to the eyes than to each other and situated a little above the centro-ocular line; clypeus rather longly pubescent with golden hairs, somewhat roundedly lobate at base, tip rounded, rostrum brown and pubescent and extending to base of posterior coxae; antennae ochraceous, flagellum pale brown and about as long as the distance between the ocelli.

Thorax. *Pronotum* dark brown, paler on humeral angles posterior margin and posterior process, finely punctate, upper part of metopidium and disc covered with short dark brown pubescence, lower part of metopidium and basal margin near angles of scutellum with longer golden pubescence, posterior process shortly sparsely ochraceously pubescent; metopidium vertical, wider than high, convex, several bare impunctate callosities above each eye; posterior process rising a little above the disc of the pronotum, about as far above the scutellum as the breadth of the posterior tibiae, very slightly sinuous, tricarinate and acuminate to tip which reaches half way along the margin of the fifth apical cell of the tegmina on which it impinges; median carina strong on posterior process, continued more weakly over the disc and on the metopidium; tegmina about three times as long as wide, somewhat wrinkled, shining dark brown and opaque except a translucent pale fascia extending from the inner angle to the first apical cell, and another almost obsolete band arising near the termination of the second anal vein

and extending in a backward curve to the subcosta, basally narrowly coriaceous and deeply punctate, veins strong, shortly pilose, somewhat beaded and more or less parallel, five apical and two subapical cells, limbus wide; humeral angles triangular and prominent; sides of thorax densely pubescent with golden-yellow and whitish hairs; legs simple, basal joints dark brown, tibiae tricarinate, paler brown, marginally pilose, tarsi dark brown, basal joint of posterior tarsi much longer than the second and terminating in a short spine.

Scutellum dark brown, wider than long, deeply punctate with long sparse pale yellow or white pubescence, tip broadly emarginate.

Abdomen dull chocolate-brown above and deeply punctate, without pubescence except on apical segment where it is long and very pale yellow; below darker brown, longly pubescent along pleura and on genital segment.

Length 8 to 8.25 mm.; width at humeral angles 3.5 mm., at eyes 3 mm.

Male similar to female but much darker and slightly smaller.

Length 7.25 mm.; width at humeral angles 3.1 mm., at eyes 2.75 mm.

Nymph last instar. Entirely shining chestnut brown.

Head subelliptical, about three times as wide as long, weakly centrally, vertically sulcate, sparsely, whitely microscopically pilose; eyes greyish, large and a little oblique; ocelli rather obscure, a little nearer to the eyes than to each other and situated a little below the centro-ocular line; clypeus horizontal, scarcely visible from frontal aspect, longer than wide with a few rather long white hairs, rostrum reaching to beyond base of posterior coxae.

Thorax. *Pronotum* smooth and shining, lightly sculptured; metopidium backwardly sloping, wider than high, apex rounded and produced over the mesothorax in a short stout acuminate process which reaches almost to the posterior margin of the mesothorax; wing buds well developed and reaching the posterior margin of the second abdominal segment; mesothorax centro-dorsally a little overlapping the metathorax; legs simple with the tibiae somewhat compressed and laterally ridged.

Abdomen with seven visible segments (the first only just visible at the posterior margin of the metathorax), and the anal tube, which is brown at the base shading to yellowish ochraceous for two-thirds its length, lateral margins of segments 3 to 7 produced in strong sharp spines which curve slightly forward in the anterior segments, the degree of curvature becoming less caudad. All the segments are sparsely covered with microscopic whitish setae and the anal tube bears longer ochraceous hairs. The first sternite is pale and succeeding ones become darker caudad.

Length 5.5 to 6 mm.; width at eyes 2.25 mm.

Holotype ♀, allotype ♂, 2 ♀ and 7 ♂ paratypes, and sixteen nymphs from Yapo (Côte d'Ivoire), 5-15 X 1946, A. Villiers coll.

Holotype, allotype, 1 ♀, 4 ♂ paratypes and 10 nymphs in collection I.F.A.N. 1 ♀, 3 ♂ paratypes and six nymphs in my collection.

I have pleasure in dedicating this species to Dr. A. de Villiers who discovered it.

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